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STN SEARCH 10/633,742
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FILE 'HOME' ENTERED AT 12:05:39 ON 27 APR 2006

=> file .nash

TOTAL FOR ALL FILES

L7 7 HPTPBETA OR HTPTB

=> dup rem 17

PROCESSING COMPLETED FOR L7

L8 7 DUP REM L7 (0 DUPLICATES REMOVED)

=> dup rem 18

INVENTOR(S):

PROCESSING COMPLETED FOR L8

L9 7 DUP REM L8 (0 DUPLICATES REMOVED)

=> d ibib abs 1-7

L9 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:331682 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:352651

TITLE: The three-dimensional structure of protein tyrosine

phosphatase β subunit and its use in drug design Evdokimov, Artem Gennady; Pokross, Matthew Eugene

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA SOURCE: U.S. Pat. Appl. Publ., 335 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2004077065 A1 20040422 US 2003-634027 20030804

PRIORITY APPLN. INFO.: US 2002-413547P P 20020925

AB The crystal structures of the catalytic domain of the human protein tyrosine phosphatase HPTPβ, in ligand-bound and ligand-free forms are described. These structures are useful in computer aided drug design for identifying compds. that bind or activate HPTPbeta and thereby modulate angiogenesis mediated disorders or diseases.

L9 ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:370111 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200370111

TITLE: Lipid phosphatase activity of PTPRQ in regulation of cell

survival and proliferation.

AUTHOR(S): Oganesian, Anush [Reprint author]; Poot, Martin [Reprint

author]; Daum, Guenter; Wright, Matthew [Reprint author];
Coats, Scott [Reprint author]; Seifert, Ron [Reprint

author]; Bowen-Pope, Daniel F. [Reprint author]

CORPORATE SOURCE: Dept. Pathology, University of Washington, 1959 NE Pacific

Street, Box 357470, Seattle, WA, 98195-7470, USA

SOURCE: FASEB Journal, (March 22, 2002) Vol. 16, No. 5, pp. A969.

print.

Meeting Info.: Annual Meeting of Professional Research Scientists on Experimental Biology. New Orleans, Louisiana,

USA. April 20-24, 2002.

CODEN: FAJOEC. ISSN: 0892-6638.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Jul 2002

Last Updated on STN: 3 Jul 2002

Recently, it has been reported that physiological substrate for PTPase PTEN, a tumor suppressor protein with low tyrosine phosphatase activity, is phosphotidylinositol 3,4,5-trisphosphate (PIP3). PTEN2, a highly conserved homologue of PTEN, has also been reported as phospholipid phosphatase. In this study we investigate the function of novel receptor like protein tyrosine phosphatase PTPRQ with a single intracellular domain, previously reported by us as rPTP-GMC1. Similar to PTEN and PTEN2, the PTPRQ, demonstrates low but measurable tyrosine phosphatase activity toward both phosphoprotein and peptide substrates, as compared with the activity of hPTPbeta with single intracellular domain. Recombinant PTPRQ protein exhibits lipid phosphatase activity towards PIP2 and PIP3 as determined by malachite green assay and HPLC analysis. In addition, the expression of PTPRQ in glioblastoma U87MG and U373 cells induces GO/G1 cell cycle arrest and apoptosis/anoikis via downregulation of Akt activity. It is conceivable that PTPRQ may target several downstream pathways including the PI3K/Akt pathway, thus regulating cell cycle progression and/or cell survival.

L9 ANSWER 3 OF 7 MEDLINE on STN

ACCESSION NUMBER: 96399106 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 8805677

TITLE: Autoantibodies in insulin-dependent diabetes recognize

distinct cytoplasmic domains of the protein tyrosine

phosphatase-like IA-2 autoantigen.

AUTHOR: Lampasona V; Bearzatto M; Genovese S; Bosi E; Ferrari M;

Bonifacio E

CORPORATE SOURCE: Department of Internal Medicine, Istituto Scientifico San

Raffaele, Milan, Italy.

SOURCE: Journal of immunology (Baltimore, Md.: 1950), (1996 Sep

15) Vol. 157, No. 6, pp. 2707-11.

Journal code: 2985117R. ISSN: 0022-1767.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

OTHER SOURCE: GENBANK-L18983

ENTRY MONTH: 199612

ENTRY DATE: Entered STN: 28 Jan 1997

Last Updated on STN: 28 Jan 1997 Entered Medline: 12 Dec 1996

Protein tyrosine phosphatase-like IA-2 is a major autoantigen in insulin-dependent AR diabetes. It has been identified as both a specificity of cytoplasmic islet cell Abs and one of the precursors of the 40- and 37-kDa tryptic fragment islet autoantigens. To characterize autoantibody binding to IA-2 and determine whether humoral autoimmunity extends to other tyrosine phosphatases, we analyzed serum reactivity in 100 patients with insulin-dependent diabetes against different in vitro translated portions of the IA-2 protein as well as the tyrosine phosphatase domains of HPTPbeta and HPTPdelta. All autoantibody reactivity was confined to the cytoplasmic portion of IA-2 (amino acids 601-979). At least four epitopes were found. These were contained within amino acids 605 to 620 and 605 to 682 of the juxtamembrane region and within amino acids 777 to 937 and 687 to 979 in the IA-2 tyrosine phosphatase-like domain. Footprinting studies confirmed the presence of multiple epitopes. Fifty-six percent of sera with IA-2 Abs bound epitopes within the juxtamembrane region, and 83% bound epitopes in the tyrosine phosphatase-like domain; 39% had Abs to both regions. No reactivity against the IA-2 ectodomain or the tyrosine phosphatase domains of HPTPbeta and HPTPdelta was found. These data suggest that the cytoplasmic region, in particular the tyrosine phosphatase-like domain, is the major target of IA-2 Abs in insulin-dependent diabetes, and that autoantibody reactivity is specific for IA-2 or IA-2-like molecules.

L9 ANSWER 4 OF 7 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1994:51508 SCISEARCH Full-text

THE GENUINE ARTICLE: MR988

TITLE: MOLECULAR-CLONING OF A HUMAN TRANSMEMBRANE-TYPE

PROTEIN-TYROSINE-PHOSPHATASE AND ITS EXPRESSION IN

GASTROINTESTINAL CANCERS

AUTHOR: MATOZAKI T (Reprint); SUZUKI T; UCHIDA T; INAZAWA J;

ARIYAMA T; MATSUDA K; HORITA K; NOGUCHI H; MIZUNO H;

SAKAMOTO C; KASUGA M

CORPORATE SOURCE: KOBE UNIV, SCH MED, SCH MED, DEPT INTERNAL MED 2, KUSUNOKI

CHO, CHUO KU, KOBE 650, JAPAN (Reprint); KYOTO PREFECTURAL

UNIV MED, DEPT HYG, KAMIGYO KU, KYOTO 602, JAPAN

COUNTRY OF AUTHOR: JAPAN

JOURNAL OF BIOLOGICAL CHEMISTRY, (21 JAN 1994) Vol. 269, SOURCE:

No. 3, pp. 2075-2081.

ISSN: 0021-9258.

PUBLISHER: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650

ROCKVILLE PIKE, BETHESDA, MD 20814-3996 USA.

DOCUMENT TYPE:

Article; Journal

LANGIJAGE . REFERENCE COUNT: English

49

ENTRY DATE:

Entered STN: 1994

Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB

To determine the expression of various protein-tyrosine phosphatases (PTPs) in human gastric cancers, cDNAs encoding conserved PTP domains were amplified by reverse transcriptase polymerase chain reaction from KATO-III cell mRNA and sequenced. Among 72 polymerase chain reaction clones, one of the cDNA sequences encoded a novel potential PTP (stomach cancer-associated PTP, SAP-I). The full length (3.9 kilo-bases) of the SAP-I cDNA was further isolated from the KATO-III cell cDNA library and the WiDr cell cDNA library. The predicted amino acid sequence of the SAP-1 cDNA showed that mature SAP-1 consisted of 1093 amino acids and a transmembrane-type PTP, which possessed a single PTP-conserved domain in the cytoplasmic region. The extracellular region of SAP-1 consisted of eight fibronectin type III-like structure repeats and contained multiple N-qlycosylation sites. These data suggest that SAP-1 is structurally similar to HPTPbeta and that SAP-1 and HPTPbeta represent a subfamily of transmembrane-type PTPs. SAP-1 was mainly expressed in brain and liver and at a lower level in heart and stomach as a 4.2-kilobase mRNA, but it was not detected in pancreas or colon. In contrast, among cancer cell lines tested, SAP-1 was highly expressed in pancreatic and colorectal cancer cells. The bacterially expressed SAP-1 fusion protein had tyrosine-specific phosphatase activity. Immunoblotting with anti-SAP-1 antibody showed that SAP-1 is a 200-kDa protein. In addition, transient transfection of SAP-1 cDNA to COS cells resulted in the predominant expression of a 200-kDa protein recognized by anti-SAP-1 antibody. SAP-1 is mapped to chromosome 19 region q13.4 and might be related to carcinoembryonic antigen mapped to 19q13.2.

T.9 ANSWER 5 OF 7 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on

ACCESSION NUMBER:

1993:678413 SCISEARCH Full-text

THE GENUINE ARTICLE: MF294

TITLE:

ALTERNATIVE SPLICING IN A NOVEL TYROSINE PHOSPHATASE GENE (DPTP4E) OF DROSOPHILA-MELANOGASTER GENERATES 2 LARGE RECEPTOR-LIKE PROTEINS WHICH DIFFER IN THEIR CARBOXYL

TERMINI

AUTHOR:

OON S H (Reprint); HONG A; YANG X H; CHIA W

CORPORATE SOURCE:

NATL UNIV SINGAPORE, INST MOLEC & CELL BIOL, DROSOPHILA

NEUROBIOL LAB, SINGAPORE 0511, SINGAPORE

COUNTRY OF AUTHOR:

SINGAPORE

SOURCE:

JOURNAL OF BIOLOGICAL CHEMISTRY, (15 NOV 1993) Vol. 268,

No. 32, pp. 23964-23971.

ISSN: 0021-9258.

PUBLISHER:

AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650

ROCKVILLE PIKE, BETHESDA, MD 20814.

DOCUMENT TYPE: FILE SEGMENT:

Article; Journal

LANGUAGE:

LIFE English

REFERENCE COUNT:

58

ENTRY DATE:

Entered STN: 1994

Last Updated on STN: 1994

AΒ

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS A novel Drosophila receptor-like protein tyrosine phosphatase gene, DPTP4E, was

isolated and characterized. DPTP4E, located at cytological position 4E1-2, is comprised of 10 exons; its RNA products are widely expressed during embryonic development, including the developing central nervous system. DPTP4E produces three major developmentally regulated transcripts of 6.5, 7.0, and 7.5 kilobases. The two major embryonic transcripts arise as the result of the alternative splicing of exon IX; as a consequence, two proteins (200 and 183 kDa) are produced which differ in their carboxyl-terminal sequences. The deduced extracellular domain, which lies between two putative hydrophobic transmembrane segments, contains 11 fibronectin type III-like repeats and 25 putative N-glycosylation sites. A single conserved protein tyrosine phosphatase (PTPase) catalytic domain, which shows a

high level of amino acid identity to the Drosophila PTPase DPTP10D and human HPTPbeta, is found in the predicted intracellular domain; this PTPase domain, when expressed as a fusion protein in Escherichia coli, exhibits PTPase activity. The possible implications of these findings are discussed.

ANSWER 6 OF 7 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on

STN

AUTHOR:

AB

1993:336520 SCISEARCH Full-text ACCESSION NUMBER:

THE GENUINE ARTICLE: LD535

SUBSTRATE SPECIFICITIES OF CATALYTIC FRAGMENTS OF TITLE:

PROTEIN-TYROSINE PHOSPHATASES (HPTP-BETA, LAR, AND CD45)

TOWARD PHOSPHOTYROSYLPEPTIDE SUBSTRATES AND THIOPHOSPHOTYROSYLATED PEPTIDES AS INHIBITORS

CHO H J (Reprint); KRISHNARAJ R; ITOH M; KITAS E;

BANNWARTH W; SAITO H; WALSH C T

CORPORATE SOURCE: HARVARD UNIV, SCH MED, DEPT BIOL CHEM & MOLEC PHARMACOL,

240 LONGWOOD AVE, BOSTON, MA 02115; HARVARD UNIV, SCH MED, DANA FARBER CANC INST, DIV TUMOR IMMUNOL, BOSTON, MA 02115; HOFFMANN LA ROCHE LTD, PHARMA RES NEW TECHNOL,

CH-4002 BASEL, SWITZERLAND

USA; SWITZERLAND COUNTRY OF AUTHOR:

PROTEIN SCIENCE, (JUN 1993) Vol. 2, No. 6, pp. 977-984. SOURCE:

ISSN: 0961-8368.

PUBLISHER: CAMBRIDGE UNIV PRESS, 40 WEST 20TH STREET, NEW YORK, NY

10011-4211.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE LANGUAGE: English REFERENCE COUNT: 37

ENTRY DATE: Entered STN: 1994

Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

The transmembrane PTPase HPTPbeta differs from its related family members in having a single rather than a tandemly duplicated cytosolic catalytic domain. We have expressed the 354-amino acid, 41-kDa human PTPbeta catalytic fragment in Escherichia coli, purified it, and assessed catalytic specificity with a series of pY peptides. HPTPbeta shows distinctions from the related LAR PTPase and T cell CD45 PTPase domains: it recognizes phosphotyrosyl peptides of 9-11 residues from lck, src, and PLCgamma with K(m) values of 2, 4, and 1 muM, some 40-200-fold lower than the other two PTPases. With k(cat) values of 30-205 s-1 , the catalytic efficiency, k(cat)/K(m), of the HPTPbeta 41-kDa catalytic domain is very high, up to 5.7 x 10(7) M-1 s-1. The peptides corresponding to PLCgamma (766-776) and EGFR (1,167-1,177) phosphorylation sites were used for structural variation to assess pY sequence context recognition by HPTPbeta catalytic domain. While exchange of the alanine residue at the +2 position of the PLCgamma (K(m) of 1 muM) peptide to lysine or aspartic acid showed little or no effect on substrate affinity, replacement by arginine increased the K(m) 35-fold. Similarly, the high K(m) value of the EGFR pY peptide (K(m) of 104 muM) derives largely from the arginine residue at the +2 position of the peptide, since arginine to alanine single mutation at the -2 position of the EGFR peptide decreased the K(m) value 34-fold to 3 muM. Three thiophosphotyrosyl peptides have been prepared and act as substrates and competitive inhibitors of these PTPase catalytic domains.

L9 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1992:607887 CAPLUS Full-text

DOCUMENT NUMBER: 117:207887

TITLE: Expression and characterization of wild type, truncated, and mutant forms of the intracellular

region of the receptor-like protein tyrosine

phosphatase HPTPβ

Wang, Yue; Pallen, Catherine J. AUTHOR (S):

CORPORATE SOURCE: Inst. Mol. Cell Biol., Natl. Univ. Singapore,

Singapore, 0511, Singapore Journal of Biological Chemistry (1992), 267(23), SOURCE .

16696-702

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

Human HPTPB is unique among mammalian receptor-like protein tyrosine phosphatases in that AB it has only a single catalytic domain. The intracellular region of HPTP β was expressed in bacteria, purified, and characterized. It exhibits high activity toward all substrates tested and is potently inhibited by zinc. Vanadate and polyanions also inhibited activity. The juxta-membrane segment of HPTPB (residues 1622-1639) potentially functions as a neq. regulatory sequence since its deletion can increase HPTPB activity 5-fold. This segment contains up to two sites for protein kinase C phosphorylation, although in vitro phosphorylation by this kinase did not affect HPTPB activity. The boundaries of the catalytic domain were delineated by truncation analyses. Successive deletion of N-terminal sequence prior to residue 1684 had little effect on substrate affinity and at most reduced activity about 6-fold. Further removal of residues 1684-1686 resulted in a marked 50-500fold drop in activity, and loss of N-terminal sequence prior to residue 1690 abolished activity. Based on these analyses a highly conserved motif was identified in all mammalian tyrosine phosphatases (E/q) (F/y) XX(L/i), corresponding to positions 1684-1688 of HPTPβ. Mutation of residue 1684 or 1685 generally gave rise to proteins with marked temperature sensitivity. These mutant HPTP β were active but had reduced activity compared to the wild type enzyme. In conjunction, these results suggest that this region represents the N-terminal border of the catalytic domain and is essential for correct phosphatase folding although not directly involved in catalysis. Parallel truncation studies have defined residues 1930-1939/40 as the C-terminal border of the catalytic

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=> s (human protein tyrosine phosphatase β) or (human protein tyrosine phosphatase beta)
            2 FILE MEDLINE
L10
             8 FILE CAPLUS
Lll
L12
             2 FILE SCISEARCH
L13
             O FILE LIFESCI
L14
             2 FILE BIOSIS
             2 FILE EMBASE
L15
TOTAL FOR ALL FILES
1.16
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               TYROSINE PHOSPHATASE BETA)
=> s 116 and vegfr2
L17
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L18
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             0 FILE BIOSIS
L21
             O FILE EMBASE
TOTAL FOR ALL FILES
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PROCESSING COMPLETED FOR L16
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1.24
=> d ibib abs 1-6
L24 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2005:60754 CAPLUS Full-text
                           Correction of: 2004:1036571
DOCUMENT NUMBER:
                         142:233342
                           Correction of: 142:16836
TITLE:
                         Sequences of human schizophrenia related genes and use
                         for diagnosis, prognosis and therapy
INVENTOR(S):
                         Liew, Choong-Chin
PATENT ASSIGNEE(S):
                         Chondrogene Limited, Can.
                         U.S. Pat. Appl. Publ., 156 pp., Cont.-in-part of U.S.
                         Ser. No. 802,875.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004241727	A1	20041202	US 2004-812731		20040330
US 2004014059	A1	20040122	US 2002-268730		20021009
US 2005191637	A1	20050901	US 2004-803737		20040318
US 2005196762	A1	20050908	US 2004-803759		20040318
US 2005196763	A1	20050908	US 2004-803857		20040318
US 2005196764	A1	20050908	US 2004-803858		20040318
US 2005208505	A1	20050922	US 2004-803648		20040318
US 2004265869	A1	20041230	US 2004-812716		20040330
US 2005208519	A1	20050922	US 2004-989191		20041115
PRIORITY APPLN. INFO.:			US 1999-115125P	P	19990106
			US 2000-477148	B1	20000104
			US 2002-268730	A2	20021009
			US 2003-601518	A2	20030620
			US 2004-802875	A2	20040312
			US 2004-812731	A2	20040330
			WO 2004-US20836	A2	20040621
_					

The present invention is directed to detection and measurement of gene transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing and monitoring diseases using gene-specific and/or tissue-specific primers. The present invention also describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

L24 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:60755 CAPLUS Full-text

Correction of: 2004:1036570

DOCUMENT NUMBER: 142:154259

Correction of: 142:36938

TITLE: Analysis of genetic information contained in peripheral blood for diagnosis, prognosis and

monitoring treatment of allergy, infection and genetic

disease in human Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.

SOURCE: U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S.

Ser. No. 802,875. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 29

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004241726	A1	20041202	US 2004-812707	20040330
US 2004014059	A1	20040122	US 2002-268730	20021009
US 2005191637	A1	20050901	US 2004-803737	20040318
US 2005196762	A1	20050908	US 2004-803759	20040318
US 2005196763	A1	20050908	US 2004-803857	20040318
US 2005196764	A1	20050908	US 2004-803858	20040318
US 2005208505	A1	20050922	US 2004-803648	20040318
US 2004265869	A1	20041230	US 2004-812716	20040330
PRIORITY APPLN. INFO.:			US 1999-115125P	P 19990106
			US 2000-477148	B1 20000104
			US 2002-268730	A2 20021009
			US 2003-601518	A2 20030620
			US 2004-802875	A2 20040312

The present invention is directed to detection and measurement of gene transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular allergy, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis,

osteoarthritis, liver cancer, schizophrenia, Chagas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

L24 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:85984 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:194432

TITLE: Human prostate cancer marker genes associated with

various metastatic stages identified by gene

profiling, and related compositions, kits, and methods

for diagnosis, prognosis and therapy Schlegel, Robert; Endege, Wilson O. Millennium Pharmaceuticals, Inc., USA

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc SOURCE: U.S. Pat. Appl. Publ., 131 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2004009481	A1	20040115	US 2002-166883	20020611
US 2004009481	A1	20040115	US 2002-166883	20020611
PRIORITY APPLN. INFO.:			US 2001-297285P P	20010611
			US 2002-166883 A	20020611

The invention relates to compns., kits, and methods for diagnosing, staging, prognosing, AB monitoring and treating human prostate cancers. A variety of marker genes are provided, wherein changes in the levels of expression of one or more of the marker genes is correlated with the presence of prostate cancer. In particular, three sets of the marker genes set, corresponding to 11617 GenBank Accession Nos. (only 2168 new submissions) and 15 SEQ IDs, are identified by transcription profiling using RNA derived from clin. samples, that were expressed at least 2-fold or greater than the normal controls. Using TNM staging approach, these markers are divided to three groups, ones can be used to determine whether prostate cancer has metastasized, or is likely to metastasize, to the liver (M stage); ones can be used to determine whether prostate cancer has metastasized, or is likely to metastasize, to the bone (M stage); and ones can be used to determine whether prostate cancer has metastasized, or is likely to metastasize, to the lymph nodes (N stage and/or M stage). The invention also relates to a kit for assessing the specific type of metastatic prostate cancer, e.g., cancer that has metastasized to the liver, bone or lymph nodes. [This abstract record is one of three records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

L24 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2001:716750 CAPLUS Full-text

DOCUMENT NUMBER: 136:243732

TITLE: Nucleic acid-based ribozyme and DNAzyme modulators of

gene expression

INVENTOR(S): Mcswiggen, James; Usman, Nassim; Blatt, Lawrence;

Beigelman, Leonid; Burgin, Alex; Karpeisky, Alexander; Matulic-Adamic, Jasenka; Sweedler, David; Draper, Kenneth; Chowrira, Bharat; Stinchcomb, Dan; Beaudry, Amber; Zinnen, Shawn; Lugwig, Janos; Sproat, Brian S.

PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 717 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001016312 A3 20010809 WO 2000-US23998 20000830
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR,

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CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
         IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
    MD, MG, MK, MN, MW, MX, MZ, NO, NZ
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB,
         GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
PRIORITY APPLN. INFO.:
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                                             US 1999-PV173612
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                                             IIS 1999-474432
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                                                                      20000320
                                             US 2000-2000/PV19776U
                                                                      20000414
                                             US 2000-2000/578223
                                                                      20000523
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Novel nucleic acid mols. useful as inhibitors of gene expression, compns., and methods for AB their use are provided. The invention features novel nucleic acid-based techniques (e.g., enzymic nucleic acid mols. (ribozymes), antisense nucleic acids, 2-5A antisense chimeras, triplex DNA, and antisense nucleic acids containing RNA-cleaving chemical groups) and their use to modulate the expression of mol. targets impacting the development and progression of cancers, diabetes, obesity, Alzheimer's disease diseases, age-related diseases, and/or hepatitis B infections and related conditions. Catalytic nucleic acids were designed for site-specific cleavage of human mRNA targets encoding protein tyrosine phosphatase 1b, methionine aminopeptidase, β-secretase, presenilin-1, epidermal growth factor receptor-2 (HER2/c-erb2/neu), phospholamban, telomerase, and hepatitis B virus genes. Methods for chemical synthesis of modified nucleoside triphosphates (NTPs) and RNA polymerase-catalyzed incorporation of modified NTPs into catalytic oligonucleotides are also provided. [This abstract record is the fifth of six records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

L24 ANSWER 5 OF 6 MEDLINE ON STN DUPLICATE 2

ACCESSION NUMBER: 95291173 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 7539661

TITLE: High-sensitivity determination of tyrosine-phosphorylated

peptides by on-line enzyme reactor and electrospray

ionization mass spectrometry.

AUTHOR: Amankwa L N; Harder K; Jirik F; Aebersold R

CORPORATE SOURCE: Biomedical Research Centre, University of British Columbia,

Vancouver, Canada.

SOURCE: Protein science : a publication of the Protein Society,

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AB We describe a simple, fast, sensitive, and nonisotopic bioanalytical technique for the detection of tyrosine-phosphorylated peptides and the determination of sites of protein tyrosine phosphorylation. The technique employs a protein tyrosine phosphatase micro enzyme reactor coupled on-line to either capillary electrophoresis or liquid chromatography and electrospray ionization mass spectrometry instruments. The micro enzyme reactor was constructed by immobilizing genetically engineered, metabolically biotinylated human protein tyrosine phosphatase beta onto the inner surface of a small piece of a 50-microns inner diameter, 360-microns outer diameter fused silica capillary or by immobilization of the phosphatase onto 40-90-microns avidin-activated resins. By coupling these reactors directly to either a capillary electrophoresis column or a liquid chromatography column, we were able to rapidly perform enzymatic dephosphorylation and separation of the reaction products. Detection and identification of the components of the reaction mixture exiting these reactors were done by mass analysis with an on-line electrospray ionization mass spectrometer. Tyrosine-phosphorylated peptides, even if present in a complex peptide mixture, were identified by subtractive analysis of peptide patterns generated with or without phosphatase treatment. Two criteria, namely a

phosphatase-induced change in hydropathy and charge, respectively, and a change in molecular mass by 80 Da, were used jointly to identify phosphopeptides. We demonstrate that, with this technique, low picomole amounts of a tyrosine-phosphorylated peptide can be detected in a complex peptide mixture generated by proteolysis of a protein and that even higher sensitivities can be realized if more sensitive detection systems are applied.

L24 ANSWER 6 OF 6 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 94183168 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 8135747

TITLE: Characterization and kinetic analysis of the intracellular

domain of human protein

tyrosine phosphatase beta (HPTP

beta) using synthetic phosphopeptides.

AUTHOR: Harder K W; Owen P; Wong L K; Aebersold R; Clark-Lewis I;

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CORPORATE SOURCE: Biomedical Research Centre, University of British Columbia,

Vancouver, Canada.

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AB The intracellular domain of human protein tyrosine phosphatase beta (HPTP beta) (44 kDa) was expressed in bacteria, purified using epitope 'tagging' immunoaffinity chromatography, and characterized with respect to kinetic profile, substrate specificity and potential modulators of enzyme activity. A chromogenic assay based on the Malachite Green method was employed for the detection of inorganic phosphate (Pi) released from phosphopeptides by HPTP beta. This assay, modified so as to improve its sensitivity, was adapted to a 96well microtitre plate format, and provided linear detection between 50 and 1000 pmol of Pi. The cytoplasmic domain of HPTP beta was strongly inhibited by vanadate, molybdate, heparin, poly(Glu, Tyr) (4:1) and zinc ions. In order to explore the substrate preferences of this PTPase, we generated 13-residue synthetic phosphotyrosine- containing peptides that corresponded to sites of physiological tyrosine phosphorylation. HPTP beta demonstrated kcat. values between 76 and 258 s-1 using four different phosphopeptides. The substrate preference of HPTP beta was in the order srcTyr-527 > PDGF-RTyr-740 > ERK1Tyr-204 >> CSF-1RTyr-708 with Km values ranging from 140 microM to greater than 10 mM. The variations in affinity were probably due to differences among the four phosphopeptides compared, particularly with respect to the character of the charged amino acids flanking the phosphotyrosine residue.